| SECURE DIGITAL
APPLIANCE
20 | | COMMUNICATION
NETWORK
45 | | DISTRIBUTION
CENTER
44 |

FIG. 1
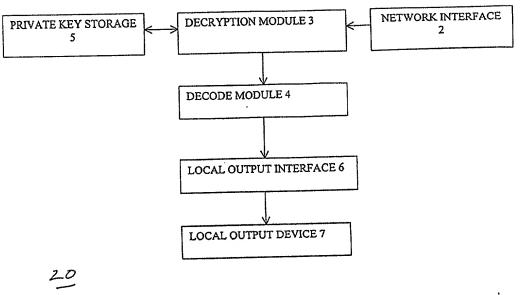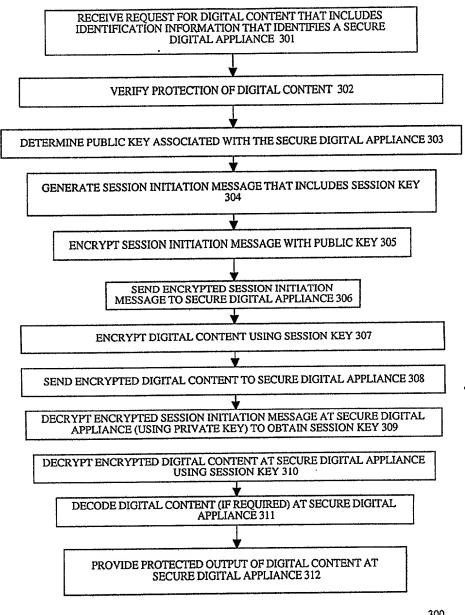
FIGURE 2

RECEIVE REQUEST FOR DIGITAL CONTENT THAT INCLUDES
IDENTIFICATION INFORMATION THAT IDENTIFIES A SECURE
DIGITAL APPLIANCE 301

↓

VERIFY PROTECTION OF DIGITAL CONTENT 302

↓

DETERMINE PUBLIC KEY ASSOCIATED WITH THE SECURE DIGITAL APPLIANCE 303

↓

GENERATE SESSION INITIATION MESSAGE THAT INCLUDES SESSION KEY
304

↓

ENCRYPT SESSION INITIATION MESSAGE WITH PUBLIC KEY 305

↓

SEND ENCRYPTED SESSION INITIATION
MESSAGE TO SECURE DIGITAL APPLIANCE 306

↓

ENCRYPT DIGITAL CONTENT USING SESSION KEY 307

↓

SEND ENCRYPTED DIGITAL CONTENT TO SECURE DIGITAL APPLIANCE 308

↓

DECRYPT ENCRYPTED SESSION INITIATION MESSAGE AT SECURE DIGITAL
APPLIANCE (USING PRIVATE KEY) TO OBTAIN SESSION KEY 309

↓

DECRYPT ENCRYPTED DIGITAL CONTENT AT SECURE DIGITAL APPLIANCE
USING SESSION KEY 310

↓

DECODE DIGITAL CONTENT (IF REQUIRED) AT SECURE DIGITAL
APPLIANCE 311

↓

PROVIDE PROTECTED OUTPUT OF DIGITAL CONTENT AT
SECURE DIGITAL APPLIANCE 312

300
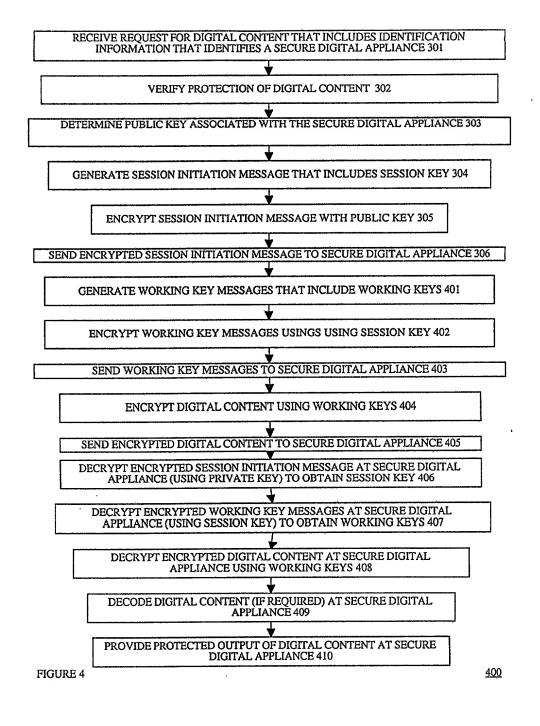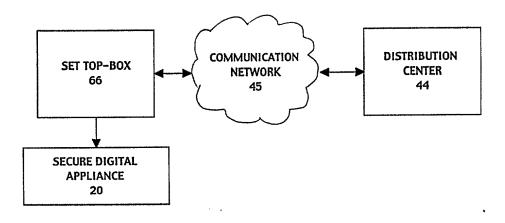
FIGURE 3

RECEIVE REQUEST FOR DIGITAL CONTENT THAT INCLUDES IDENTIFICATION INFORMATION THAT IDENTIFIES A SECURE DIGITAL APPLIANCE 301

↓

VERIFY PROTECTION OF DIGITAL CONTENT 302

↓

DETERMINE PUBLIC KEY ASSOCIATED WITH THE SECURE DIGITAL APPLIANCE 303

↓

GENERATE SESSION INITIATION MESSAGE THAT INCLUDES SESSION KEY 304

↓

ENCRYPT SESSION INITIATION MESSAGE WITH PUBLIC KEY 305

↓

SEND ENCRYPTED SESSION INITIATION MESSAGE TO SECURE DIGITAL APPLIANCE 306

↓

GENERATE WORKING KEY MESSAGES THAT INCLUDE WORKING KEYS 401

↓

ENCRYPT WORKING KEY MESSAGES USINGS USING SESSION KEY 402

↓

SEND WORKING KEY MESSAGES TO SECURE DIGITAL APPLIANCE 403

↓

ENCRYPT DIGITAL CONTENT USING WORKING KEYS 404

↓

SEND ENCRYPTED DIGITAL CONTENT TO SECURE DIGITAL APPLIANCE 405

↓

DECRYPT ENCRYPTED SESSION INITIATION MESSAGE AT SECURE DIGITAL APPLIANCE (USING PRIVATE KEY) TO OBTAIN SESSION KEY 406

↓

DECRYPT ENCRYPTED WORKING KEY MESSAGES AT SECURE DIGITAL APPLIANCE (USING SESSION KEY) TO OBTAIN WORKING KEYS 407

↓

DECRYPT ENCRYPTED DIGITAL CONTENT AT SECURE DIGITAL APPLIANCE USING WORKING KEYS 408

↓

DECODE DIGITAL CONTENT (IF REQUIRED) AT SECURE DIGITAL APPLIANCE 409

↓

PROVIDE PROTECTED OUTPUT OF DIGITAL CONTENT AT SECURE DIGITAL APPLIANCE 410

FIGURE 4   400

| SET TOP-BOX 66 | ⟷ | COMMUNICATION NETWORK 45 | ⟷ | DISTRIBUTION CENTER 44 |

SECURE DIGITAL APPLIANCE 20

FIG. 5   500

RECEIVE REQUEST FOR DIGITAL CONTENT THAT INCLUDES IDENTIFICATION INFORMATION THAT IDENTIFIES SET TOP-BOX AND SECURE DIGITAL APPLIANCE 601

VERIFY PROTECTION OF DIGITAL CONTENT 602

DETERMINE PUBLIC KEY ASSOCIATED WITH THE SET TOP-BOX AND DETERMINE PUBLIC KEY ASSOCIATED WITH THE SECURE DIGITAL APPLIANCE 603

GENERATE SESSION INITIATION MESSAGE THAT INCLUDES THE SESSION KEY FOR THE SET TOP BOX AND GENERATE A SESSION INITIATION MESSAGE THAT INCLUDES THE SESSION KEY FOR THE SECURE DIGITAL APPLIANCE 604

ENCRYPT SESSION INITIATION MESSAGE FOR THE SET TOP BOX WITH THE PUBLIC KEY FOR THE SET TOP BOX 605

ENCRYPT SESSION INITIATION MESSAGE FOR THE SECURE DIGITAL APPLIANCE WITH THE PUBLIC KEY FOR THE SECURE DIGITAL APPLIANCE 606

SEND ENCRYPTED SESSION INITIATION MESSAGE FOR SET TOP BOX TO SET TOP BOX AND SEND ENCRYPTED SESSION INITIATION MESSAGE FOR SECURE DIGITAL APPLIANCE TO SECURE DIGITAL APPLIANCE 607

ENCRYPT DIGITAL CONTENT USING SESSION KEY 608

SEND ENCRYPTED DIGITAL CONTENT TO SET TOP-BOX 609

DECRYPT ENCRYPTED SESSION INITIATION MESSAGE(USING PRIVATE KEY) AT SET TOP-BOX TO OBTAIN SESSION KEY 610

DECRYPT ENCRYPTED DIGITAL CONTENT AT SET TOP BOX USING SESSION KEY 611

DECODE DIGITAL CONTENT AT SET TOP BOX 612

ENCRYPT DECODED DIGITAL CONTENT AT SET TOP BOX USING SESSION KEY 613

SEND ENCRYPTED DECODED DIGITAL CONTENT FROM SET TOP-BOX TO SECURE DIGITAL APPLIANCE 614

DECRYPT ENCRYPTED SESSION INITIATION MESSAGE AT SECURE DIGITAL APPLIANCE (USING PRIVATE KEY) TO OBTAIN SESSION KEY 615

DECRYPT ENCRYPTED DECODED DIGITAL CONTENT AT SECURE DIGITAL APPLIANCE USING SESSION KEY 616

PROVIDE PROTECTED OUTPUT OF DIGITAL CONTENT AT SECURE DIGITAL APPLIANCE 617

FIGURE 6

600